

Amendments to the Specification:

Please replace paragraph [0001] beginning at page 1, with the following rewritten paragraph:

This application is a continuation-divisional of U.S. patent application Ser. No. 10/300,818, filed Nov. 19, 2002, which is a divisional of U.S. patent application Ser. No. 09/853,832, filed May 10, 2001, which claims priority to U.S. Provisional Application No. 60/203,000, filed May 10, 2000 and U.S. Provisional Application No. 60/254,398, filed Dec. 7, 2000, all of which are herein incorporated by reference.

Please replace paragraph [0019] beginning at page 4, with the following rewritten paragraph:

In another aspect, the invention provides a method for identifying a compound that affects binding of autoinducer-2 to an autoinducer-2 receptor by: (a) contacting autoinducer-2 and the autoinducer-2 receptor with the compound; (b) contacting (a) with a cell, or cell extract, that produces light in response to autoinducer-2 binding to the autoinducer-2 receptor; and (c) measuring the effect of the compound on light production. The compound may be a competitive inhibitor or a suicide inhibitor.

Please replace paragraph [0130] beginning at page 24, with the following rewritten paragraph:

Compounds identified in the method of the invention can be further evaluated, detected, cloned, sequenced, and the like, either in solution or after binding to a solid support, (e.g., binding to a solid support medium through an amide, ester or ether linkage), by any method usually applied to the detection of a specific DNA sequence such as PCR, oligomer restriction (Saiki et al., Bio/Technology, 3:1008-1012, 1985), allele-specific oligonucleotide (ASO) probe analysis (Conner et al., Proc. Natl. Acad. Sci. USA, 80:278, 1983), oligonucleotide ligation assays (OLAs) (Landegren et al., Science, 241:1077, 1988), and the like. Molecular techniques for DNA analysis have been reviewed (Landegren et al., Science, 242:229-237, 1988). Also included in the screening method of the invention are combinatorial chemistry methods for

identifying chemical compounds that bind to LuxP or LuxQ. See, for example, Plunkett and Ellman, "Combinatorial Chemistry and New Drugs," *Scientific American*, April, p.69 (1997).